# CLAIMS:

We claim:

1. A method of characterizing a plurality of digital-to-analog converters for a plurality of color channels of a video subsystem of a computer system, the method comprising the steps of:

driving the plurality of digital-to-analog converters with a set of predetermined input digital values;

measuring a plurality of output analog voltages of the plurality of digital-to-analog converters in response to the driving step; and

storing a plurality of digital characterization values corresponding to the plurality of output analog voltages.

2. The method of claim 1, wherein the set of predetermined input digital values comprises only a maximum input digital value for the plurality of digital-to-analog converters.

3. The method of claim 1, wherein the plurality of digital characterization values are stored in a non-volatile memory associated with the video subsystem.

4. The method of claim 1, the storing step comprising the step of:

storing a set of digital characterization values for each digital-to-analog converter of the plurality of digital-to-analog converters.

5. The method of claim 4, wherein the set of digital characterization values comprises only a single digital characterization value for each digital-to-analog converter.

6. The method of claim 1, wherein the set of predetermined input digital values comprises a plurality of input digital values for each digital-to-analog converter of the plurality of digital-to-analog converters.

7. The method of claim 1, wherein the plurality of digital characterization values comprise a plurality of digital representations of the plurality of analog output voltages.

8.    The method of claim 1, wherein the plurality of digital characterization values comprise a plurality of digital values corresponding to a mathematical model for the plurality of analog output voltages.

9.    The method of claim 1, wherein the measuring step is performed with a precision termination load resistor.

10.    The method of claim 1, wherein the plurality of digital characterization values represents a plurality of transfer functions for the plurality of digital-to-analog converters.

11.    A computer system, comprising:

    a.    a processor; and

    b.    a video subsystem coupled to the processor, the video subsystem comprising:

        b.1.    a plurality of digital-to-analog converters <u>for a plurality of color channels of the video subsystem</u>; *no patentable weight*

        b.2    a video connector coupled to the plurality of digital-to-analog converters for connection to a monitor; and

        b.3    a non-volatile memory storing a plurality of digital characterization values for the plurality of digital-to-analog converters.

12.    The computer system of claim 11, wherein the plurality of digital characterization values represent a plurality of transfer functions for the plurality of digital-to-analog converters.

13.    The computer system of claim 11, wherein the plurality of digital characterization values comprise a plurality of digital representations for a plurality of analog output voltages measured for the plurality of digital-to-analog converters by driving the plurality of digital-to-analog converters with a set of predetermined input digital values.

14.    The computer system of claim 11, wherein the plurality of digital characterization values comprises only a single digital characterization value for each digital-to-analog converter of the plurality of digital-to-analog converters.

15.    The computer system of claim 11, further comprising:

color management software executable by the processor to perform color correction based on the plurality of digital characterization values.

16. A video subsystem for a computer system, comprising:

b.1     a plurality of digital-to-analog converters for a plurality of color channels for the video subsystem; and

b.3     a non-volatile memory storing a plurality of digital characterization values for the plurality of digital-to-analog converters.

17. The video subsystem of claim 16, wherein the plurality of digital characterization values comprise a plurality of digital representations for a plurality of analog output voltages measured for the plurality of digital-to-analog converters by driving the plurality of digital-to-analog converters with a set of predetermined input digital values.

18. The video subsystem of claim 16, wherein the plurality of digital characterization values comprises only a single digital characterization value for each digital-to-analog converter of the plurality of digital-to-analog converters.

19. The video subsystem of claim 16, wherein the plurality of digital characterization values represent a plurality of transfer functions for the plurality of digital-to-analog converters.

20. A method of characterizing a plurality of color channels of a video subsystem of a computer system, the method comprising the steps of:

driving the plurality of color channels with a set of predetermined input digital values;

measuring a plurality of output analog signals of the plurality of color channels in response to the driving step; and

storing a plurality of digital characterization values corresponding to the plurality of output analog signals.

21. The method of claim 20, wherein the plurality of digital characterization values are stored in a non-volatile memory associated with the video subsystem.

22. The method of claim 20, wherein the video system comprises a graphics controller.